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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ERICSSON INC.
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EXAMINER

MACE, BRAD THOMAS

ART UNIT	PAPER NUMBER
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2663

13

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/760,572

Applicant(s)

CHARAS, PHILIPPE

Examiner

Brad T. Mace

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: "tunnelling" should be "tunneling" on line 20 of pg. 1. "harmonise" should be "harmonize" on line 1 of pg. 2. "harmonising" should be "harmonizing" on line 11 of pg. 2. "standardising" should be "standardizing" on line 31 of pg. 2. "modularising" should be "modularizing" on line 31 of pg. 2. "summarised" should be "summarized" on line 25 of pg. 3. "practised" should be "practiced" on line 28 of pg. 4. "authorised" should be "authorized" on line 34 of pg. 6 and on line 13 of pg. 8. "utilised" should be "utilized" on line 21 of pg. 8. "authorising" should be "authorizing" on line 10 of pg. 11. Line 29 of pg. 13 refers to references 700-725, but there are only particular references in this range. Correction should be made as to the exact reference numbers. "neighbouring" should be "neighboring" on lines 15-17 of pg. 14. "physical" should be "physically" on line 18 of pg. 14. "Ones" should be "once" on line 25 of pg. 14. "negociates" should be "negotiates" on line 4 of pg. 15. "Bluetooth™" on lines 14, 16, and 35 of pg. 14 should be "Bluetooth". Appropriate correction is required.

Drawings

2. The drawings are objected to because line 34-35 of specification refers to Figure 7 as a Policy Domain (PD) and sub-domain, but Figure 7 states a "Policy Repository". "Authorisation" should be "Authorization" in Figure 3. Reference 400 should be 430 in Figure 4. References 600a-c show Layer 1 and Layer 2 respectively, however, the specification refers to these references as modems. Indication of these references as

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modems is needed. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 13 is objected to because of the following informalities: "authorising" should be "authorizing". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,606,491 (Peck).

Regarding claim 14:

6. Peck discloses a policy enforcement point (SIM card, see Figure 2, reference 90) for enforcing policies defined in a policy definition point (MTSO, see Figure 1, reference 44, lines 53-67, col. 4 through lines 1-32, col. 5, and lines 54-65, col. 5) where the policy enforcement point comprises a policy enforcement engine (SIM controller, see Figure 2, reference 92) for controlling at least one task of the policy enforcement point (SIM card, lines 38-41, col. 6). Peck also discloses a policy repository (SIM EEPROM) (see Figure 2, reference 96) for storing subscriber information (lines 41-43, col. 6).

Regarding claim 15:

7. Peck discloses that the policy enforcement point (SIM card) is located within a mobile terminal (see title of Figure 2, and reference 90, and lines 38-39, col. 6).

Regarding claim 16:

8. Peck discloses that the at least one task is at least one of authenticating a user to a mobile terminal (lines 36-45, col. 7), authorizing the user to utilize a service (lines 45-49, col. 7), and collecting accounting data (lines 41-46, col. 6).

Regarding claim 17:

9. Peck discloses that the subscriber information is at least one of a subscriber relationship to access providers, a subscriber relationship to service providers, client

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obligations, client rights, shared secrets (SDD, shared secrets data, 36-45, col. 7), and addresses to credential verifiers (lines 41-43, col. 6, the EEPROM stores many subscriber related information, which can include at least one of the above mentioned subscriber information, such as SDD. Others may include the ESN, and the MIN).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 3, and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.K. Patent Application No. 2,292,653 (Poole) in view of U.S. Patent Application No. 6,606,491 (Peck).

Regarding claim 1:

12. Poole discloses a mobile terminal (see Figure 1) for accessing services via at least two mutually heterogeneous networks (lines 1-4, pg. 3). The mobile terminal comprising of at least two modems (modules) (see Figure 1, lines 23-25 of pg. 2 and lines 11-17 of pg. 6). However, Poole does not disclose expressly at least one policy enforcement point for enforcing policies defined in a policy definition point, where the at least one policy enforcement point comprising means for managing the mobile terminal's access to services via at least one of the at least two modems (modules) in at least one of the at least two mutually heterogeneous networks.

Peck discloses at least one policy enforcement point (SIM card, see Figure 2, reference 90) for enforcing policies defined in a policy definition point (MTSO, see Figure 1, reference 44, lines 53-67, col. 4 through lines 1-32, col. 5, and lines 54-65, col. 5), where the at least one policy enforcement point comprising means for managing the mobile terminal's access to services (lines 36-46, col. 6).

A person of ordinary skill in the art would have been motivated to employ Peck in Poole in order to have at least one policy enforcement point (SIM card) for enforcing policies defined in a policy definition point (MTSO) where the at least one policy enforcement point comprising means for managing the mobile terminal's access to services via at least one of the at least two modems (modules) (thought by Poole) in at least one of the at least two mutually heterogeneous networks. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Peck with Poole (collectively Poole-Peck) to obtain the invention as specified in claim 1. The suggestion/motivation to do so would have been to have a component that manages the mobile terminal's access in two or more modems to at least two mutually heterogeneous networks.

Regarding claim 3:

13. Poole further discloses that the mobile terminal is arranged for handing over a session from one of the mutually heterogeneous networks to another, by re-routing the data flow within the mobile terminal from one of the at least two modems to another (lines 17-31 of pg. 3).

Regarding claim 7:

14. Poole-Peck discloses substantially all the claimed modified invention as specified above. However, Poole does not disclose expressly that the policy enforcement point is divided into a policy enforcement engine and a policy repository.

Peck further discloses that the policy enforcement point (SIM card) is divided into a policy enforcement engine (SIM controller, see Figure 2, reference 92) and policy repository (SIM EEPROM) (see Figure 2, reference 96, and lines 41-43, col. 6).

A person of ordinary skill in the art would have been motivated to employ Peck in Poole in order to define the components that make-up the policy enforcement point (SIM card). At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Peck with Poole (collectively Poole-Peck) to obtain the invention as specified in claims 1 and 7. The suggestion/motivation to do so would have been to understand the internal composition of the policy enforcement point (SIM card).

Regarding claim 8:

15. Poole-Peck discloses substantially all the claimed modified invention as specified above. However, Poole does not disclose expressly that the policy repository is arranged for being updated from the policy definition point.

Peck further discloses that the policy repository (SIM EEPROM) is arranged for being updated from the policy definition point (MTSO, Peck, see Figure 1, reference 44, lines 53-67, col. 4 through lines 1-32, col. 5, and lines 54-65, col. 5).

A person of ordinary skill in the art would have been motivated to employ Peck in Poole in order to delineate that the policy definition point (MTSO) updates the policy

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repository (SIM EEPROM). At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Peck with Poole (collectively Poole-Peck) to obtain the invention as specified in claims 1, 7, and 8. The suggestion/motivation to do so would have been to point out that the policy repository (SIM EEPROM) can be updated (by the policy definition point (MTSO)).

Regarding claim 9:

16. Poole-Peck discloses substantially all the claimed modified invention as specified above. However, Poole does not disclose expressly that the policy repository includes a coupling matrix defining hierarchical and non-hierarchical relationships between subscribers and service providers as well as other subscribers.

Peck further discloses that the policy repository (SIM EEPROM) includes a coupling matrix defining hierarchical and non-hierarchical relationships between subscribers and service providers as well as other subscribers (lines 41-43, col. 6, and lines 30-48, col. 2, the SIM modules can be exchanged with other SIM modules in the mobile terminal yielding other subscriber information, lines 62-67, col. 2 through lines 1-8, col. 3).

A person of ordinary skill in the art would have been motivated to employ Peck in Poole to have a policy repository (SIM EEPROM) that holds information pertaining to the relationship of subscribers and service providers. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Peck with Poole (collectively Poole-Peck) to obtain

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the invention as specified in claims 1, 7, and 9. The suggestion/motivation to do so would have been to have a component that helps subscribers know which service providers they have relationships (access) with.

Regarding claim 10:

17. Poole-Peck discloses substantially all the claimed modified invention as specified above. However, Poole does not disclose expressly that the policy repository and policy enforcement engine is implemented by software code means.

Peck further discloses that the policy repository (SIM EEPROM) and policy enforcement engine (SIM controller) is implemented by software code means (Peck, lines 38-41, a SIM operation program (software) is stored in SIM Program memory 94 of Figure 2 and is executed by the SIM controller 92 of Figure 2, which runs the SIM EEPROM (policy repository) and the SIM card (policy enforcement point)).

A person of ordinary skill in the art would have been motivated to employ Peck in Poole in order to design the policy repository (SIM EEPROM) and policy enforcement engine (SIM controller) by means of software. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Peck with Poole (collectively Poole-Peck) to obtain the invention as specified in claims 1, 7, and 10. The suggestion/motivation to do so would have been to have a policy repository (SIM EEPROM) and policy enforcement engine (SIM controller) implemented by software so as to allow for easy modification of the components.

Regarding claim 11:

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18. Poole further discloses that the at least two modems are implemented as interchangeable modules (Poole, lines 32-36 of pg. 3).

19. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole-Peck as applied to claim 1 above, and further in view of U.S. Patent No.

6,498,788 (Emilsson et al.).

Regarding claims 2, 4:

20. Poole-Peck discloses substantially all the claimed invention above but does not disclose wherein the mobile terminal includes a layer 2 switch and a layer 3 router connecting data flows from at least one of the at least two modems with at least one user application and wherein the mobile terminal is arranged for routing several data flows from ongoing independent service sessions with more than one service supplied from at least one of the at least two modems to the corresponding user application.

Emilsson et al. discloses a mobile terminal that has a service function and access function (see Figure 1 reference 3 and 7, where the service function and access function effectively acts as a switch and router to provide multimedia application data to multimedia applications, references 4-6, since the radio modem is adapted to utilize the radio channel to accommodate a plurality of service applications, thus several data flows and therefore a service and access function are needed to effectively switch and route the data to the appropriate multimedia application within the mobile terminal) (lines 1-3 col. 12, lines 12-56, col. 6).

A person of ordinary skill in the art would have been motivated to employ Emilsson et al. in Poole-Peck in order to have mobile terminal that has functionality

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(service and access function) to allow for multiple application data flows from at least one of the at least two modems. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Emilsson et al. with Poole-Peck (collectively Poole-Peck-Emilsson et al.) to obtain the invention as specified in claims 1 and 2 and in claims 1 and 4. The suggestion/motivation to do so would have been to have a mobile terminal that can support routing several data flows from at least one of the at least two modems so that communication between the mobile terminal and network can take place as to allow for simultaneous (thus efficient) multiple application download.

18. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole-Peck as applied to claim 1 above, and further in view of U.S. Patent No. 6,675,015 (Martini et al.).

Regarding claims 5, 6:

21. Poole-Peck discloses substantially all the claimed invention above but does not disclose wherein the mobile terminal includes means for acting as a bridge to one of the at least two mutually heterogeneous networks for a second mobile terminal to access one of the at least two mutually heterogeneous networks and wherein the bridge is a Bluetooth interface.

Martini et al. discloses a mobile terminal that has a Bluetooth interface for accessing a network (lines 59-60, col. 8 and see Figure 1). It is known in the art that one Bluetooth mobile terminal can communicate with another Bluetooth mobile terminal because Bluetooth allows for short-range communication amongst multiple Bluetooth

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devices. Therefore one Bluetooth mobile terminal may communicate with another Bluetooth mobile terminal (thus the second Bluetooth mobile terminal acting as a bridge) to access one of the at least two mutually heterogeneous networks described above by Poole-Peck.

A person of ordinary skill in the art would have been motivated to employ Martini et al. in Poole-Peck in order to have mobile terminals supporting a Bluetooth interface. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Martini et al. with Poole-Peck (collectively Poole-Peck-Martini et al.) to obtain the invention as specified in claims 1, 5, and 6. The suggestion/motivation to do so would have been to allow for communication to occur between the terminals without having to go through any network components and to have any mobile terminal act as a bridge so that another mobile terminal can indirectly access a network that the mobile terminal may not be able to access on its own.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

*Le et al. discloses mobility management for terminals with multiple subscriptions

*Kolev et al. discloses a multi-mode mobile terminal and methods for operating
the same

*Jonsson discloses a telecommunications method for multi-network
communications

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*Vatanen discloses a mobile telephone system and method for carrying out financial transactions using a mobile telephone system

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad T. Mace whose telephone number is (703)-306-5454. The examiner can normally be reached on M-F, with the exception of every other Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703)-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btm

Brad T. Mace
Examiner
Art Unit 2663

btm
July 6, 2004


RICKY NGO
PRIMARY EXAMINER